Rotating Extension Column
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By: Daniel E. Mullins
      Extension Commercial Horticulture Agent
      Santa Rosa County

FAWN Weather Network is Fast, Accurate and Timely

During midday on March 18 the soil temperature at a four inch depth was 62 degrees F. in central Santa Rosa County. The wind speed was 18 miles per hour and the dew point at two meters above the ground surface was 62 degrees F. The air temperature was 69 degrees F. and the relative humidity was 73%.

This and much more weather related information was obtained within a few seconds by accessing the Florida Automated Weather Network (FAWN). Anyone whose work or hobbies are affected by the weather should take advantage of this great source. Computer users can go to http://fawn.ifas.ufl.edu while it can also be accessed by way of a telephone Voice Response System. Area residents can call toll free at (866)754-5732 and enter 110 for the Jay weather station or select another location from the voice menu.

The FAWN system is composed of 35 automated weather stations located at sites throughout Florida. Its mission is to provide accurate and timely weather data to a wide variety of users. Because of the importance of weather in agriculture, every effort is made to provide new data every 15 minutes. In addition to general weather data leaf wetness, wet bulb temperature and the evapotranspiration rate is also provided.

Though I have used FAWN many times in the past, the use today demonstrates one of its many practical applications. I wished to know the current soil temperature and how it could be affecting producers of warm season vegetable crops. At the current 62 degrees F. the germination of seeds and growth of recent transplants will be slow. In fact, this is far below the ideal range of 68 to 86 degrees.

Learning that soil temperatures were excessively cold following planting allows the farmer to predict low plant populations or root and stem diseases.

Measures can then be taken early – either treatment of the existing plants, or plans to re-establish the vegetable plants later when the soil warms.

FAWN also maintains archived weather data that is stored in searchable databases and the search functions provide for immediate access to weather data. Data that is mined from the archives can be used generate reports or prepare graphs. I often use the archives to determine the number of chill hours that have accumulated each winter. This is important information for those who produce deciduous fruits.

Incidentally, the central part of Santa Rosa County received 677 chill hours, or hours below 45 degrees F. during this past winter. Since that area averages 550 to 650 each year, the dormancy requirement for many of our deciduous fruits and other plants has been well satisfied.

Though FAWN weather information is critical for agriculture, it's not just for farmers. Other industries and private citizens find unique uses for FAWN. In construction the data on temperature and humidity aid in the mixing of concrete and improve the prediction of drying times. Anglers use FAWN for reliable, localized information about weather conditions and fishing possibilities.

For more information of if you have a question, call Dan Mullins, Extension Commercial Horticulture Agent, The University of Florida/IFAS-Santa Rosa County Extension, at 850-623-3868, between the hours of 8:00 am and 4:30 pm weekdays. Hearing-impaired individuals may call Santa Rosa County Emergency Management Service at 983-5373 (TDD).

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